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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Application Number: 10/786,980
Filing Date: February 25, 2004
Appellant(s): KAMDAR ET AL.

James D. Stevens
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 07/23/2007 appealing from the Office action mailed 10/16/2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| 6745151 | Marko et al. | 6-2004 |
| 5491631 | Shirane et al. | 2-1996 |

2005/0154500 A1   Sonnenrein et al.   07-2005

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-5, 7-9, and 19-26 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Marko et al. (USP 6,745151) in view of Sonnenrein et al. (US

2005/0154500 A1) and Shirane et al. (USP 5,491,631).

Regarding claims 1 and 19, Marko et al. teach a system for providing automated

vehicle diagnostic function comprising: means for providing the primary diagnostic script

to the mobile vehicle (e.g. Col.3, lines 27-40, Col.7, lines 55-61); mean for executing the

primary diagnostic script (e.g. Col.3, lines 27-40, Col.7, lines 55-61); and mean for

storing diagnostic data based on the executed primary diagnostic script (e.g. Col.3, lines

27-40, Col.4, lines 33-53, Col.6, lines 38-48, Col.7, line 66-Col.8, line 11).

Marko et al. fail to teach means for configuring a primary diagnostic script for a telematics equipped mobile vehicle, wherein the primary diagnostic script recreates known problem sequences when executed.

Sonnenrein et al. teach configuring a primary diagnostic script (configuration scripts [0031]) for a telematics equipped mobile vehicle (e.g. [0033], [0035]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include configuring a primary diagnostic script for a telematics equipped mobile vehicle as taught by Sonnenrein et al. in a diagnostic/prognostic system monitors performance of a vehicle of Marko et al. for the purpose of providing telematics terminals with a suitable access and are already present in the vehicle to be used for performing vehicle-related telematics applications (Sonnenrein et al., [0003]).

Shirane et al. teach the primary diagnostic script (fault diagnostic program) recreates known problem sequences when executed (fault diagnosis can be made)(e.g. Col.10, lines50-Col.11, line 14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include inform the diagnostic script recreates known problem sequences when executed as taught by Shirane et al. in a diagnostic/prognostic system monitors performance of a vehicle of Marko et al. in view of Sonnenrein et al. for the purpose of providing a fault diagnostic system for a vehicle which can provide fault diagnosis and classification with high accuracy oil the basis of data such as engine type and engine specification required for identifying a vehicle, and which can find a true

faulty portion in a short time without requiring any special knowledge or experience (Shirane et al., Col.5, lines 41-49).

Regarding claim 20, Marko et al. teach a method for providing vehicle diagnostic function within vehicle communication system comprising: the primary diagnostic script includes a plurality of diagnostic scripts (e.g. Col.8, lines 26-30) that are determined based on diagnostic options (e.g. Col.7, line 66-Col.8, line 2); providing the primary diagnostic script to the mobile vehicle (e.g. Col.3, lines 27-40, Col.7, lines 55-61); executing the primary diagnostic script (e.g. Col.3, lines 27-40, Col.7, lines 55-61); and storing diagnostic data based on the executed primary diagnostic script (e.g. Col.3, lines 27-40, Col.4, lines 33-53, Col.6, lines 38-48, Col.7, line 66-Col.8, line 11).

Marko et al. fail to teach determining a primary diagnostic script for a telematics equipped mobile vehicle.

Sonnenrein et al. teach determining a primary diagnostic script (configuration scripts [0031]) for a telematics equipped mobile vehicle (e.g. [0033], [0035]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include deteriming a primary diagnostic script for a telematics equipped mobile vehicle as taught by Sonnenrein et al. in a diagnostic/prognostic system monitors performance of a vehicle of Marko et al. for the purpose of providing telematics terminals with a suitable access and are already present in the vehicle to be used for performing vehicle-related telematics applications (Sonnenrein et al., [0003]).

Regarding claims 2, 21, Marko et al. teach analyzing the stored diagnostic data (e.g. 55, Figs.3-4, Col.7, lines 17-31).

Regarding claims 3, 22, Marko et al. teach initiating the automated vehicle diagnostic function (e.g. Col.8, lines 2-8).

Regarding claims 4, 23, Marko et al. teach initiating the automated vehicle diagnostic function comprises: receiving a request for automated vehicle diagnostic function from a user interface (technician); and identifying diagnostic routines based on the received request (e.g. Co.3, lines 52-60).

Regarding claim 5, Marko et al. teach configuring the primary diagnostic script comprises: determining at least one diagnostic script based on diagnostic options (e.g. Col.7, line 66-Col.8, line 2); and retrieving the at least one diagnostic script (e.g. Col.6, lines 49-57), wherein the one or more diagnostic scripts are combined into the primary diagnostic script (e.g. Col.8, lines 26-30).

Regarding claims 7, 24, Marko et al. teach the primary diagnostic script triggers data capture when specific conditions exist (e.g. 55, Figs.3-4, Col.7, lines 8-46).

Regarding claims 8, 25, Marko et al. teach storing diagnostic data based on the executed primary diagnostic script comprises: receiving diagnostic data from vehicle system modules (e.g. Col.2, lines 47-49); and storing the received diagnostic data (e.g. Col.4, lines 33-53, Col.6, lines 38-48).

Regarding claims 9, 26, Marko et al. teach the diagnostic data is selected from the group consisting of: diagnostic trouble codes (e.g. Col.2, lines 42-47, Col.6, lines 38-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include inform the diagnostic script recreates known problem

sequences when executed as taught by Shirane et al. in a diagnostic/prognostic system

monitors performance of a vehicle of Marko et al. in view of Sonnenrein et al. for the

purpose of providing a fault diagnostic system for a vehicle which can provide fault

diagnosis and classification with high accuracy oil the basis of data such as engine type

and engine specification required for identifying a vehicle, and which can find a true

faulty portion in a short time without requiring any special knowledge or experience

(Shirane et al., Col.5, lines 41-49).

(10) Response to Argument

The rejection of claims 1 and 19

In response to Appellants' argument that "Shirane et al. do not contain any

teaching or suggestion "the primary diagnostic script recreates known problem

sequences" (Appeal Brief, page 9, paragraph 2), the examiner disagrees. Shirane et al.

teach the primary diagnostic script (fault diagnostic program) recreates known problem

sequences when executed (fault diagnosis can be made)(e.g. Col.10, lines 50-Col.11,

line 14). Shirane et al. teach the fault diagnostic program detecting and analyzing fault

when the fault diagnostic program executed (e.g. Col.10, lines 50-Col.11, line 14), this

feature is seen to be a clear teaching of that the primary diagnostic script recreates

known problem sequences when executed as intended.

The rejection of claims 1-5, 7-9, and 19

In response to Appellants' argument that "The Combination of Marko,

Sonnenrein, and Shirane does not Render Obvious the Subject Matter of Claims 1-5, 7-

9, and 19" (Appeal Brief, page 11, paragraph 2), the examiner disagrees. The invention

of Marko et al. relate in general to remote diagnostics and prognostics for complex

systems, such as vehicles or other machinery, and, more specifically, to a vehicle

telematics system and method for transmitting operating data collected on-board a

vehicle to a central diagnostic center. The invention of Shirane et al. relate a fault

diagnostic system for vehicles which is adapted to communicate with an electronic

control unit carried on a vehicle such as a car and provided with a self-diagnostic

function of detecting and recording faults of various sensors and actuators, and based

on the communication result, finds the failures of the electronic control unit and the

peripheral equipment connected thereto. The invention of Sonnenrein et al. relate to a

method and device for transmitting, sending and/or receiving information in conjunction

with a vehicle, in particular, for remote diagnostics, remote control and/or remote

operation of a component/function of the vehicle. The inventions of Marko et al.,

Sonnenrein et al., and Shirane et al. have the same filed of technology. Therefore

Marko et al., Sonnenrein et al., and Shirane et al. Render Obvious the Subject Matter of

Claims 1-5, 7-9, and 19.

The rejection of claims 4 and 23

In response to Appellants' argument that "Marko et al. do not contain any

teaching or suggestion "receiving a request for automated vehicle diagnostic function

from a user interface; and identifying diagnostic routines based on the received request"

(Appeal Brief, page 11, paragraph 5), the examiner disagrees. Marko et al. inherently

teach receiving a request for automated vehicle diagnostic function from a user

interface (technician); and identifying diagnostic routines based on the received request

(e.g. Co.3, lines 52-60). Marko et al. teach the invention uses an external, centralized computational resource to analyze the data and render a diagnosis, whether by automated analysis or expert technician. The analysis can be completed using real-time data exchange with the vehicle and executing diagnostic routines as necessary to accomplish the diagnostic task (e.g. Co.3, lines 52-57), this feature is seen to be an inherent teaching of that the receiving a request for automated vehicle diagnostic function from a user interface; and identifying diagnostic routines based on the received request as intended.

The rejection of claims 5 and 20-26

In response to Appellants' argument that "Marko et al. do not contain any teaching or suggestion "a plurality of diagnostic scripts that are determined based on diagnostic options" (Appeal Brief, page 12, paragraph 5), the examiner disagrees. Marko et al. inherently teach a plurality of diagnostic scripts (scripted algorithms 62) that are determined based on diagnostic options (data subset)(e.g. Col.7, line 66-Col.8, line 2). Marko et al. teach the scripted algorithms 62 perform data analysis using data signals collected by the diagnostic module which may be included in the data subset then being stored in the pre-event or post-event buffers (e.g. Col.7, line 66-Col.8, line 2), wherein the data subset is determined from a subset configuration 57 controls a selection of data within all the data signals available for collection and provides periodic samples to an input of pre-event buffer 51 (Col.6, line 67-Col.7, line 2), this feature is seen to be an inherent teaching of that the a plurality of diagnostic scripts that are determined based on diagnostic options as intended.
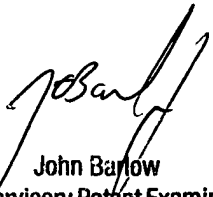
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

John Le

October 19, 2007

John Barlow
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Conferees:

David Blum

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